

**LABORATORY FOR  
ATMOSPHERES**

Section 7

## 7. 1996 Refereed Publications

### Laboratory for Atmospheres

"Dielectric Current in a Plasma," K. D. Cole, *Physics of Plasma*, **3**, 2717-2724, 1996.

"Equatorial Thermosphere-Ionosphere-Plasma Disturbances," K. D. Cole, *J. Geomagnetism and Geoelectricity*, **48**, 187-210, 1996.

"Joule Heating by AC Electric-Fields in the Ionosphere of Venus," K. D. Cole, W. R. Hoegy, *J. Geophys. Res.-Space Physics*, **101**, 2269-2278, 1996.

"The 100 HZ Electric-Fields Observed on Pioneer Venus Orbiter and a Case Against the Whistler Hypothesis for Them," K. D. Cole, W. R. Hoegy, *J. Geophys. Res.-Space Physics*, **101**, 21785-21793, 1996.

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"Desert-Scrub as the Cause of Reduced Reluctances in Protected Versus Impacted Sandy Arid Areas," J. Otterman, *International Journal of Remote Sensing*, **17**, 615-619, 1996.

"Regional Trends of Surface and Tropospheric Temperature and Evening-Morning Temperature Difference in Northern Latitudes - 1973-1993, R. J. Ross, J. Otterman, D. O. Starr, W. P. Elliot, J. K. Angell, J. Susskind, *Geophys. Res. Lett.*, **23**, 3179-3182, 1996.

"A Multiple-Level Trajectory Analysis of Vortex Filaments," M. R. Schoeberl, P. A. Newman, *J. Geophys. Res.-Atmos.*, **100**, 25801-25815, 1996.

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"An Estimation of the Dynamical Isolation of the Tropical Lower Stratosphere Using UARS Wind and Trace Gas Observations of the Quasi-Biennial Oscillation," M. R. Schoeberl, A. E. Roche, J. M. Russell III, D. Ortland, P. B. Hays, and J. W. Waters, *Geophys. Res. Lett.*, **24**, 53-56, 1997

"Tritons Ionospheric Source-Electron-Precipitation or Photoionization," E. C. Sittler, R. E. Hartle, *J. Geophys. Res.-Space Physics*, **101**, 10863-10876, 1996.

"Observational Constraints on the Formation of Type Ia Polar Stratospheric Clouds," A. Tabazadeh, O. B. Toon, B. L. Gary, J. T. Bacmeister, M. R. Schoeberl, *Geophys. Res. Lett.*, **23**, 2109-2112, 1996.

"The Gaseous Sulfur-Dioxide Abundance Over IO Leading and Trailing Hemispheres-HST Spectra of IO (CB2)-B-1-X(1)A(1) Band of SO<sub>2</sub> Near 2100 Angstrom," L. M. Trafton, J. J. Caldwell, C. Barnet, C. C. Cunningham, *Astrophys. J.*, **456**, 384-392, 1996.

"Penetration of Hydromagnetic Waves of Cylindrical Symmetry Through the High-Latitude Ionosphere," D. Y. Zhang, K. D. Cole, *J. Atmos. and Terr. Phys.*, **58**, 1165-1170, 1996.

## Tropical Rainfall Measuring Mission Office

"Predicting Precipitation Level," K. Fokianos, B. Kedem, D. Short, *J. Geophys. Res.*, **101**, 26,473-26,477, 1996.

"Polarization Optics and Bilinear Representation of the Lorentz Group," D. Han, Y. S. Kim, M. E. Noz, *Physics Letters A*, **219**, 26-32, 1996.

"An Approach to Remedy Beam Filling Error of TMI by the Use of VIRS Measurements," H.-S. Lim, D. Han, *J. Meteor. Soc. of Japan*, **74**, 4, 415-423, 1996.

"Evidence from Tropical Raindrop Spectra of the Origin of Rain from Stratiform vs. Convective Clouds," A. Tokay, D. Short, *J. Appl. Meteor.*, **35**, 355-371, 1996.

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"3-Dimensional Radon 222 Calculations Using Assimilated Meteorological Data and a Convective Mixing Algorithm," D. J. Allen, R. B. Rood, A. M. Thompson, R. D. Hudson, *J. Geophys. Res.-Atmos.*, **101**, 6871-6881, 1996.

"The Relative Roles of Lateral Boundaries, Initial Conditions, and Topography in Mesoscale Simulations of Lee Cyclogenesis," P. Alpert, S. O. Krichak, T. N. Krishnamurti, U. Stein, T. Tsidulko, *J. Appl. Meteor.*, **35**, 1091-1099, 1996.

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"A Multiyear Global Surface Wind Velocity Dataset Using SSM/I Wind Observations," R. Atlas, R. N. Hoffman, S. C. Bloom, J. C. Jusem, J. Ardizzone, *Bull. Amer. Meteor. Soc.*, **77**, 869-882, 1996.

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"Diabatic Dynamic Initialization with an Iterative Time Integration Scheme as a Filter," M. S. Fox-Rabinovitz, *Mo. Wea. Rev.*, **124**, 1544-1557, 1996.

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"The Moisture Budget of the Central United States in Spring as Evaluated in the NCEP/NCAR and the NASA/DAO Reanalyses," R. W. Higgins, K. C. Mo, S. D. Schubert, *Mo. Wea. Rev.*, **124**, 939-963, 1996.

"Simulations of Persistent North Pacific Circulation Anomalies and Interhemispheric Teleconnections," R. W. Higgins, S. D. Schubert, *J. Atmos. Sci.*, **53**, 188-207, 1996.

"Temporal and Spatial Variations in Upper Atmosphere MG+," J. Joiner, A. C. Aikin, *J. Geophys. Res.-Physics*, **101**, 5239-5249, 1996.

"A Study of the Behavior of Semi-Lagrangian Models in the Presence of Orography," Y. Li, J. R. Bates, *Q. J. R. Meteor. Soc.*, **122**, 1675-1700, 1996.

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"On 4-Dimensional Variational Assimilation of Ozone Data in Weather-Prediction Models," L. P. Riishojgaard, *Quart. J. of Roy. Meteor. Soc.*, **122**, 1545-1571, 1996.

"An Objective Method for Inferring Sources of Model Error," S. D. Schubert, Y. Chang, *Mo. Wea. Rev.*, **124**, 325-340, 1996.

"Long-Lived Tracer Transport in the Antarctic Stratosphere," S. E. Strahan, J. E. Nielsen, M. C. Cerniglia, *J. Geophys. Res.-Atmos.*, **101**, 26615-26629, 1996.

## Mesoscale Atmospheric Processes Branch

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"Multi-wavelength Comparison of Modeled and Measured Remote Tropospheric Aerosol Backscatter Over Pacific Ocean," D. R. Cutten, R. F. Peuschel, D. A. Bowdle, V. Srivastava, A. D. Clarke, J. Rothermel, J. D. Spinhirne, R. T. Menzies, *J. Geophys. Res.-Atmos.*, **101**, 9375-9389, 1996.

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"On the Generation of Internal Waves Beneath Sea-Ice by a Moving Load," D. G. Duffy, *Cold Regions Science and Technology*, **24**, 29-39, 1996.

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"Impact of Initial Conditions, Assimilation of Rainfall Rates and Cumulus Parameterization on Simulations of Hurricane Florence (1988)," V. M. Karyampudi, G. S. Lai, J. Manobianco, *Mo. Wea. Rev.*, **122**, 2, 341-365, 1996.

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"Optical Depth Measurements of Aerosol, Cloud, and Water Vapor Using Sun Photometers During Fire Cirrus IFO-II," M. Shiobara, J. D. Spinhirne, A. Uchiyama, S. Asano, *J. Applied Meteorology*, **35**, 36-46, 1996.

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